

CLAIMS:

1. A seat structure, comprising:
 - a flat spring member disposed in such a manner that one end is in engagement with an arbitrary frame member to be displaced backward by backward moment, which deforms a seat back under an impact force from front or back equal to or stronger than that prescribed, and the other end is in engagement with a frame member disposed in the vicinity of the front edge of a cushion frame,
 - 10 wherein the flat spring member increases in tension as said seat back is deformed.
2. A seat structure, comprising:
 - a cushion frame provided with a frame member deforming under an impact force from front or back equal to or stronger than that prescribed; and
 - 15 a flat spring member disposed in such a manner that one end thereof is in engagement with an arbitrary frame member to be displaced backward along with deformation of a seat back by backward moment applied to said seat back, and the other end is in engagement with the frame member disposed in the vicinity of the front edge of the cushion frame,
 - 20 wherein the flat spring member increases in tension accompanied by deformation of said seat back to perform a function to increase the intensity of the backward moment of the seat back.
- 25 3. The seat structure according to claims 1 or 2, wherein the arbitrary frame member engaged with one end of said flat spring member and

displacing backward by the backward moment toward said seat back includes a frame member composing a back frame.

4. The seat structure according to claims 1 or 2, wherein the arbitrary frame member engaged with one end of said flat spring member and displacing backward by the backward moment toward said seat back comprises the frame member elastically supported in an independent state from the back frame, and provided at a position corresponding to the vicinity from the haunches to the waist, along the width direction of the seat.

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5. The seat structure according to claim 4, wherein the arbitrary frame displacing backward by backward moment toward said seat back comprises a frame member composing said cushion frame, and is supported by an arm biased in a direction of backward tilt under a normal state by means of a 15 torsion bar disposed along the width direction at a position to be deformed by an impact force equal to or stronger than that prescribed to said seat back.

6. The seat structure according to claims 1 or 2, further comprising:
20 a stopper to control deformation of the cushion frame and the back frame under an impact force from front or back equal to or stronger than that prescribed.

7. The seat structure according to claim 1 or 2, wherein said flat spring member comprises one kind selected from a two-dimensional net member and 25 a three-dimensional net member or a combination of two kinds or more thereof.

8. The seat structure according to claims 1 or 2,
wherein said cushion member comprises one kind selected from a
two-dimensional net member, a three-dimensional net member and a urethane
5 material or a combination of two kinds or more thereof, and is disposed above
the flat spring member in such a manner that one end thereof is in
engagement with the arbitrary frame member to be displaced backward along
with deformation of the seat back by backward moment applied to the seat
back and the other end is in engagement with a frame member disposed in the
10 vicinity of the front edge of the cushion frame.

9. The seat structure according to claim 8, wherein said cushioning
member comprises a three-dimensional net member formed by connecting
two layers of front and back of ground knitted fabrics with connecting yarn.

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10. The seat structure according to claim 9, further comprising:
a portion without connecting yarn at the arbitrary position between
one end and the other end of said three-dimensional net member where no
connecting yarn is provided and the ground knitted fabrics directly face each
20 other.